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Letter

UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Paul R. Johannessen

Serial No. 09/922,283

Art Unit: 3662

Filed: August 3, 2001

Examiner:


For: Method of High-Power Switching and Switch Apparatus For Frequency
Modulation Within Loran-C Signals

Hon. Commissioner of Patents
and Trademarks
Washington, DC 20231

Dear Sir:

With reference to the above application, we enclose five (5) sheets of formal
drawings for filing in the US PTO.

Respectfully submitted:


Robert H. Rines, Esq.,
Reg. 15,932

Date: November 9, 2001
RINES & RINES
81 North State Street
Concord, NH 03301
Tel (603 220-0121)
Reg. No. 16,118

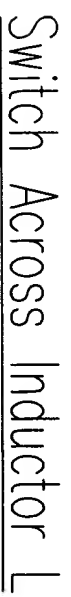
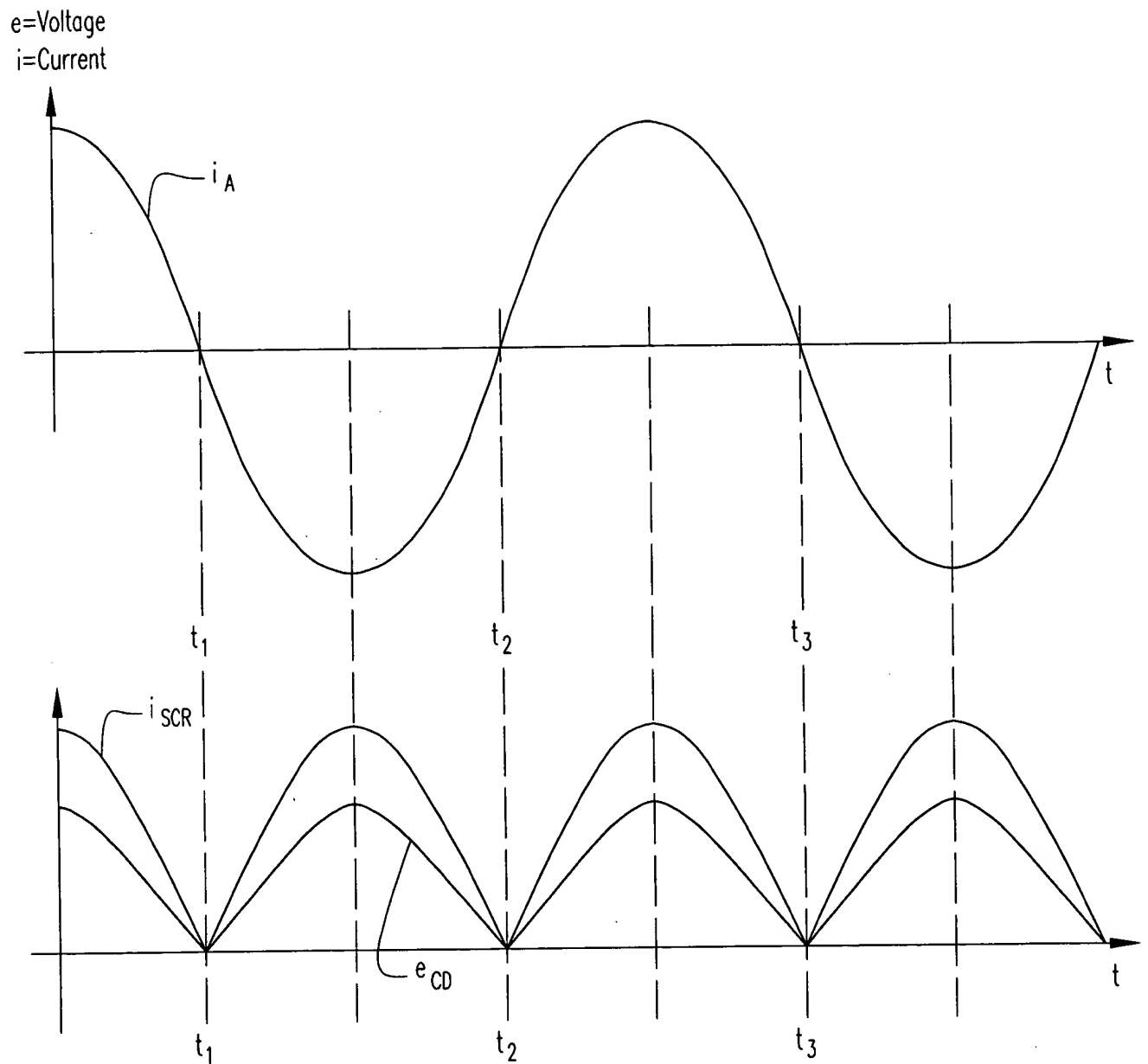
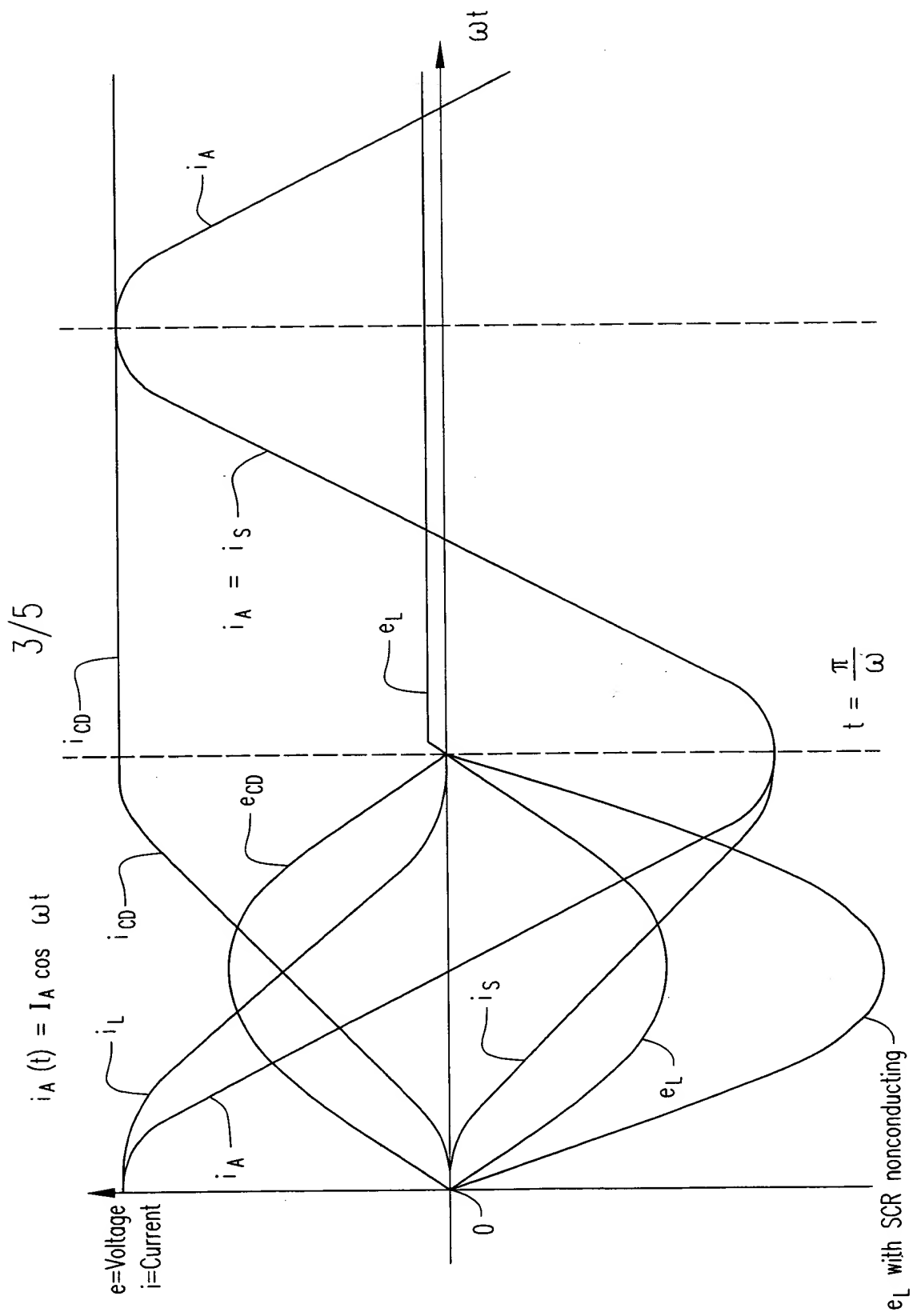


FIG. 1



Switch Waveforms With Series Resistor

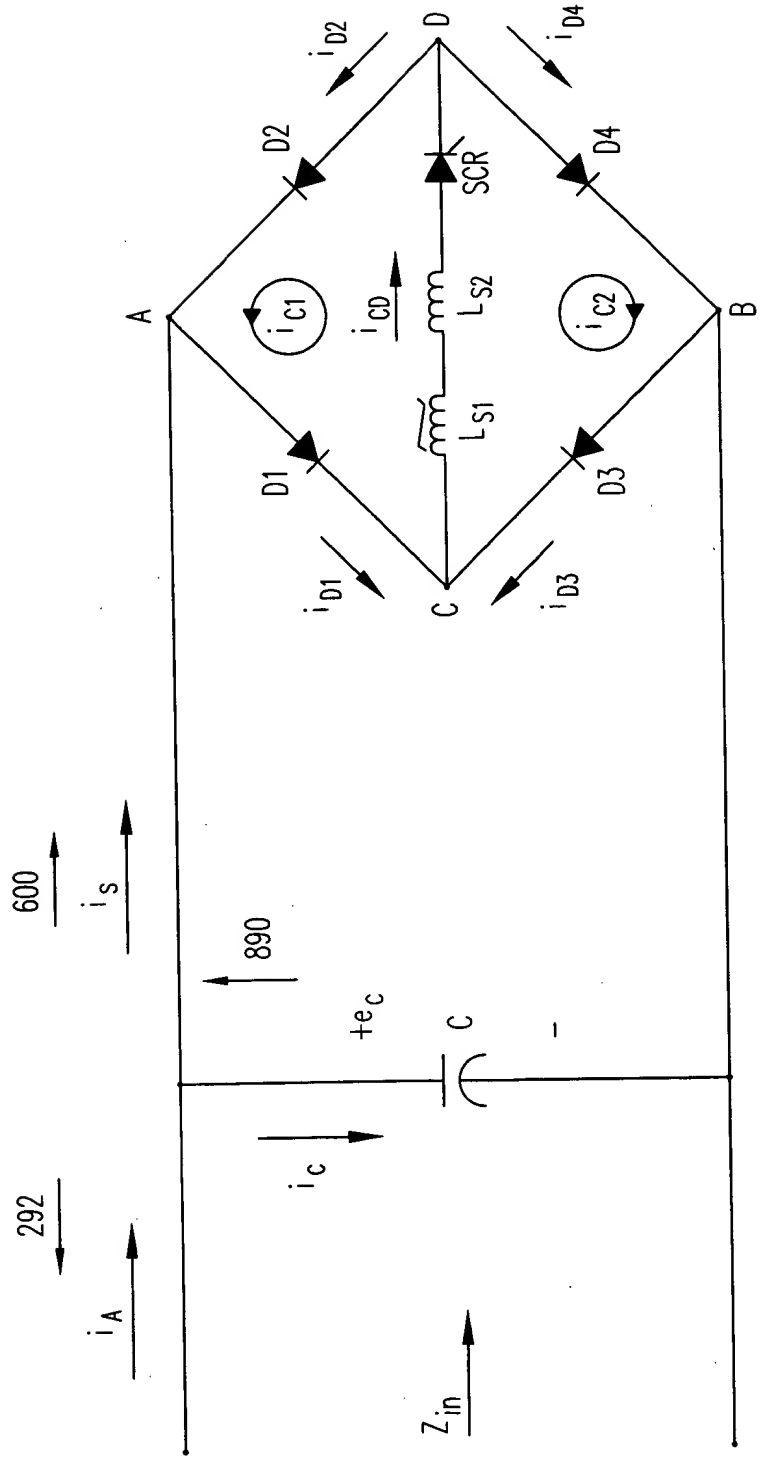
FIG. 2



Voltage and Current Waveform for Inductor Switching

FIG. 3

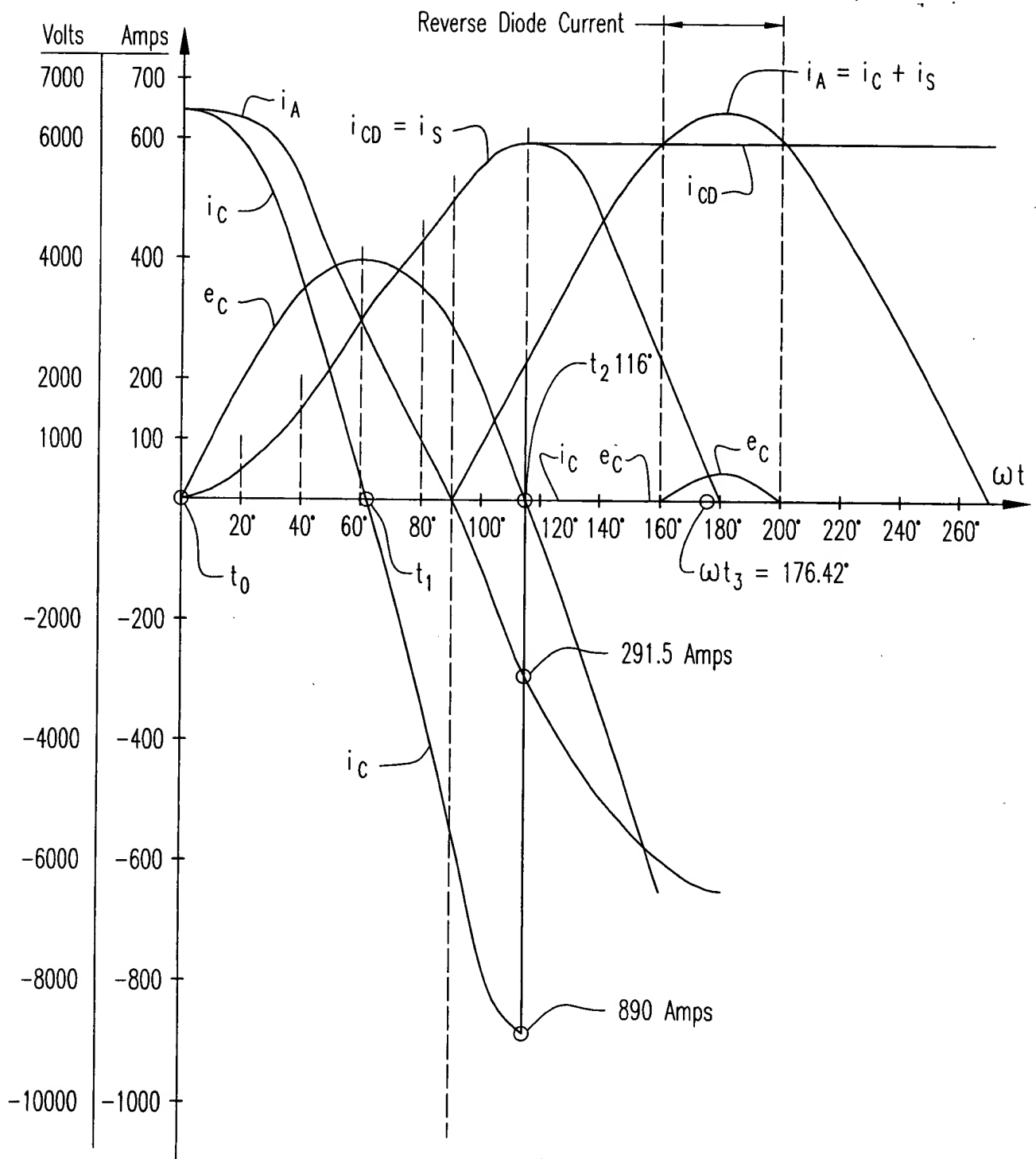
$\omega t = 90^\circ$, $i_A = 0$, i_{CD} positive, i_C negative, $i_A = i_C + i_S$



Switch Across Series Capacitor

FIG. 4

5/5



Voltage and Current Waveform for Capacitor Switching

FIG. 5